

IN THE CLAIMS:

Kindly cancel claims 1-7 and add new claims 8-27 as shown in the following listing of claims, which replaces all previous versions and listings of claims.

1. - 7. (canceled).

8. (new) An ink jet head comprising:

a substrate having a plurality of grooves each for receiving ink and extending along a longitudinal direction;

a nozzle plate connected to the substrate and having a plurality of nozzle apertures each disposed in communication with respective ones of the grooves;

ink storing means for storing ink;

an ink chamber plate connected to the substrate and having an ink chamber for supplying ink from the ink storing means to the grooves;

means defining an ink flow path for transporting ink from the ink storing means to the ink chamber of the ink chamber plate;

a filter disposed in the ink flow path; and

a flow path substrate connected between the ink storing means and the ink chamber plate, at least portions of the ink flow path being formed in the flowpath substrate, the ink flow path having a tubular communicating passage having a

first end connected to the ink storing means and a second end, an ink reservoir in which the filter is disposed to divide the ink reservoir into an upstream space disposed on a first side of the filter and a downstream space disposed on a second side of the filter opposite the first side, an ink introduction passage for transporting ink along a flow direction generally perpendicular to the longitudinal direction of each of the grooves and having a first end connected to the second end of the tubular communicating passage and a second end connected to the upstream space, an ink supply passage having a first end connected to the downstream space and a second end connected to the ink chamber plate for supplying ink to the ink chamber, the ink supply passage being inclined downwardly relative to a horizontal line disposed generally parallel to the flow direction of ink in the ink introduction passage, and each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space having a thickness smaller than an inner diameter of the tubular communicating passage.

9. (new) An ink jet head according to claim 8; wherein the filter is disposed generally parallel to the longitudinal direction of each of the grooves and has an upper end disposed proximate the second end of the ink introduction passage and a lower end disposed proximate the first end of the ink supply passage.

10. (new) An ink jet head according to claim 8;
wherein the filter is disposed generally perpendicular to the longitudinal direction of each of the grooves and has lower and upper sides corresponding to the first and second sides thereof, respectively.

11. (new) An ink jet head according to claim 8;
wherein the thicknesses of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space are equal to one another.

12. (new) An ink jet head according to claim 8;
wherein the thickness of each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space is equal to or less than 1.0 mm.

13. (new) An ink jet recording apparatus having the ink jet head according to claim 8.

14. (new) An ink jet head comprising:
a first substrate having a plurality of partition walls spaced apart at a preselected interval to form a plurality of parallel grooves each for receiving ink and extending along a longitudinal direction;
an ink storing member for storing ink;

an ink chamber plate connected to the first substrate to define with the partition walls an ink chamber for supplying ink stored in the ink storing member to the grooves; and

a second substrate connected between the ink storing member and the ink chamber plate, the second substrate having an ink flow path for transporting ink from the ink storing member to the ink chamber of the ink chamber plate and a filter disposed in a portion of the ink flow path, the ink flow path having a communicating passage having a first end connected to the ink storing member and a second end, an ink reservoir in which the filter is disposed to divide the ink reservoir into an upstream space disposed on a first side of the filter and a downstream space disposed on a second side of the filter opposite the first side, an ink introduction passage for transporting ink along a flow direction generally perpendicular to the longitudinal direction of each of the grooves and having a first end connected to the second end of the communicating passage and a second end connected to the upstream space, and an ink supply passage having a first end connected to the downstream space and a second end connected to the ink chamber plate for supplying ink to the ink chamber, the ink supply passage being inclined downwardly toward the ink chamber of the ink chamber plate relative to a horizontal

line disposed generally parallel to the flow direction of ink in the ink introduction passage.

15. (new) An ink jet head according to claim 14; further comprising a nozzle plate connected to the first substrate and having a plurality of nozzle apertures each disposed in communication with respective ones of the grooves.

16. (new) An ink jet head according to claim 14; wherein each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space has a thickness smaller than an inner diameter of the communicating passage.

17. (new) An ink jet head according to claim 16; wherein the thicknesses of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space are equal to one another.

18. (new) An ink jet head according to claim 17; wherein the thickness of each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space is equal to or less than 1.0 mm.

19. (new) An ink jet head according to claim 14; wherein the filter is disposed generally parallel to the longitudinal direction of each of the grooves and has an upper

end disposed proximate the second end of the ink introduction passage and a lower end disposed proximate the first end of the ink supply passage.

20. (new) An ink jet head according to claim 14; wherein the filter is disposed generally perpendicular to the longitudinal direction of each of the grooves and has lower and upper sides corresponding to the first and second sides thereof, respectively.

21. (new) An ink jet recording apparatus having the ink jet head according to claim 14.

22. (new) An ink jet head comprising: means defining a plurality of parallel grooves each extending along a longitudinal direction for receiving ink stored in an ink storing member, an ink chamber disposed in communication with the grooves, and an ink flow path for transporting ink to the grooves via an ink chamber, the ink flow path having a communicating passage connected to the ink storing member, an ink introduction passage connected to the communicating passage for transporting ink along a flow direction generally perpendicular to a longitudinal direction of each of the grooves, an ink reservoir connected to the ink introduction passage, and an ink supply passage connected to the ink reservoir for supplying ink to the ink chamber, the ink supply

passage being inclined downwardly toward the ink chamber relative to a horizontal line disposed generally parallel to the flow direction of ink in the ink introduction passage; and a filter disposed in the ink reservoir for filtering the ink supplied to the ink chamber.

23. (new) An ink jet head according to claim 22; wherein the filter divides the ink reservoir into an upstream space disposed on a first side of the filter and a downstream space disposed on a second side of the filter opposite the first side; and wherein each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space has a thickness smaller than an inner diameter of the communicating passage.

24. (new) An ink jet head according to claim 23; wherein the thicknesses of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space are equal to one another.

25. (new) An ink jet head according to claim 24; wherein the thickness of each of the ink introduction passage, the ink supply passage, the upstream space, and the downstream space is equal to or less than 1.0 mm.

26. (new) An ink jet head according to claim 22;
wherein the filter is disposed generally parallel to the
longitudinal direction of each of the grooves.

27. (new) An ink jet head according to claim 22;
wherein the filter is disposed generally perpendicular to the
longitudinal direction of each of the grooves.